REMARKS

Claims 1-9 are pending. Claim 1 is an independent claim. Claims 10-36 were previously cancelled without prejudice. Reconsideration and allowance of the above-referenced application are respectfully requested.

Claims 1-9 stand rejected under 35 USC 103(a) as allegedly being unpatentable over the suggested combination of Blumenau et al. (US 6,195,703), hereinafter "Blumenau," in view of Pian et al. (US 5,357,632), hereinafter "Pian," and in further view of Bonnell et al. (US 5,655,081), hereinafter "Bonnell." The rejections are respectfully traversed.

Claim 1 describes a method of managing resources among multiple networked processors that include a host processor and the remote processor. The method includes collecting accounting information from an accounting manager residing in and executed by a corresponding networked processor of the multiple networked processors. The accounting manager monitors utilization of resources at the corresponding networked processor. An upper limit of resources that may be consumed by the remote processor is received, where the resources include a local resource controlled by the host processor. The local resource is released to the remote processor based on the collected accounting information. If an amount of resources consumed by the remote processor is below the upper limit, the utilization of the local resource is maintained within a pre-determined upper threshold. If at least one of the upper threshold and the upper limit is exceeded, the availability of the local resource to the remote processor by the host processor is reduced. The suggested combination of Blumenau, Pian, and Bonnell does not

describe or suggest all the features of the claimed subject matter.

In this regard, Blumenau describes a data network including a switch that links a number of host processors to shared resources such as network ports of a cached storage subsystem. Further, Blumenau describes that the switch routes resource requests from its inputs to selected ones of its outputs in accordance with programmed routing information. The routing information is changed dynamically based on measured loading characteristics of requests from the switch inputs or the respective hosts, in order to reduce the probability of blocked paths. *See*, e.g., Blumenau at Abstract.

The Office contends that because Blumenau discloses monitoring frequencies of the host to balance usage, Blumenau describes "the utilization of the local resource maintained within a pre-determined upper threshold," as claimed. *See*, e.g., Office Action, page 2, last paragraph - page 3, 1st paragraph. Applicant respectfully submits that frequency as described in Blumenau is not the local resource, as claimed. Claim 1 recites, in part, "wherein the accounting manager monitors utilization of resources at the corresponding networked processor; … the resources including a local resource controlled by the host processor;" (Emphasis added). Thus, as claimed the local resource is included in a networked processor and is controlled by the host processor.

Blumenau's frequency is not resources included in a networked processor or resources controlled by the host processor. In contrast, Blumenau's frequency is a frequency at which data packets are received from and transmitted to the loop ports of the switch. *See*, e.g., Blumenau, col. 6, lines 44 - 47. Because Blumenau's frequency relates to a frequency of data

packets, Blumenau does not describe or suggest "a local resource," as claimed. Because Blumenau does not describe or suggest "a local resource," Blumenau certainly does not describe or suggest releasing the local resource to the remote processor based on a pre-determined upper threshold, as claimed.

Although Blumenau describes a number of networked processors, Blumenau does not describe or suggest managing resources among the plurality of networked processors, as claimed. In contrast, Blumenau describes a port switch included in a network of processors that includes a loop activity monitoring facility 48 and a dynamic balancing facility 49. The loop activity monitoring facility 48 measures the frequency of data packets received from and transmitted to each of the loop ports 42 of the switch 40. The dynamic balancing facility adjusts the list of storage subsystem ports for each loop port based on the frequency of data packets received from and transmitted to each of the loop ports and a priority level assigned to each of the loops, in order to dynamically balance the loading of the data packets upon the storage ports. *See*, e.g., Blumenau, col. 6, lines 40-54. Thus, Blumenau describes managing a port switch included in a network of processors, and does not describe "managing resources among a plurality of networked processors," as claimed.

Further, the Office concedes that Blumenau does not describe collecting accounting information from an accounting manager residing in and executed by a corresponding networked processor, as claimed. To rectify this deficiency of Blumenau, the Office cites Bonnell which describes monitoring and managing the applications and resources on a distributed computer network. *See*, e.g., Bonnell at Abstract. Further, Bonnell describes an agent software system, installed on each server

computer system, that carries out tasks such as discovering which resources and applications are present on the computer system, monitoring particular aspects of the resources and applications present on the computer system, and executing recovery actions automatically when such actions are warranted. *See*, e.g., Bonnell, col. 7, lines 1-8.

The Office appears to contend that it would be obvious to combine Bonnell's agent software system with Blumenau's switch. *See*, e.g., Office Action, page 4, 2nd paragraph. Applicant respectfully submits that the Office has provided no articulated reasoning with some rational underpinning to support this legal conclusion of obviousness. No portion of Blumenau describes or suggests monitoring resources of the processors in the network. Rather, Blumenau relates to monitoring the frequency of data packets to and from the loop ports in the switch, which is a function that Blumenau's loop monitoring facility already performs. Also, "frequency" as described in Blumenau is not "resources" as described in Bonnell.

Further, Blumenau does not describe that the inability to monitor the utilization of resources at the processors is a disadvantage of the switch 40. Furthermore, Blumenau does not describe that the ability for such monitoring will be advantageous to the switch. Also, Bonnell does not describe or suggest that including processor resource monitoring facilities of a network in another network that includes a switch to route resource requests will be advantageous to the network including the switch.

Applicant respectfully submits that there is no clear articulation for the suggested combination of Blumenau and Bonnell. Rather the Office relies on mere conclusory statements that such a combination would have been obvious without

providing some articulated reasoning with some rational underpinning. The Office must provide clear articulation of the reasons why the suggested combination of Blumenau and Bonnell would have been obvious. Absent such articulation, the Office's reasons for the suggested combination are mere conclusory statements and therefore, insufficient to support the legal conclusion of obviousness. *See*, e.g., Federal Register, vol. 72, No. 195, pages 57528-57529. Furthermore, in the absence of clear articulation, Applicant respectfully submits that the Office is relying on inappropriate hindsight reconstruction to arrive at the conclusion that it would have been obvious to combine Blumenau and Bonnell, and that such reliance is inappropriate.

In addition, the Office concedes that the suggested combination of Blumenau and Bonnell does not describe or suggest all the features of the claimed subject matter. The Office contends that Pian rectifies the deficiencies of Blumenau and Bonnell. *See*, e.g., Office Action, page 4, 3rd paragraph. This contention should be reconsidered. Pian does not rectify the deficiencies of the suggested combination of Blumenau and Bonnell.

In this regard, Pian describes a plurality of control processors to distribute data to be processed to a corresponding plurality of arithmetic processors using a dynamic allocation arrangement. The arithmetic processors process blocks of information and communicate the blocks of processed information to the control processors for subsequent processing as necessary. The control processors are implemented to efficiently allocate tasks to the arithmetic processors and to partition blocks of data for allocation as separate partitioned

tasks to the arithmetic processors. *See*, e.g., Pian at Abstract.

Pian describes a supervisory control processor 122 and a number of modularly configured processor nodes 124 comprising a distributed control processor 112 and a distributed arithmetic processor 114. A particular distributed arithmetic processor 114 is the associated arithmetic processor of the distributed control processor 112 to which it connects. *See*, e.g., Pian, fig. 3. Further, Pian states:

> Each of the distributed control processors 112 is assigned to "own" a group of the signal processing primitive tasks in the application. The owner of a task is responsible for the control and scheduling aspects of the task but is not solely responsible for the dispatch aspect of the task. In this manner a signal processing primitive task is given preference for execution by the associated arithmetic processor 114 of the owner of the task, but it can be executed by any of the distributed arithmetic processors 114 in the network 110a. The coordination of the dispatching of a task to a specific distributed arithmetic processor 114 other than the one associated with the owner of the task is performed by the supervisory control processor 122. (Emphasis added).

See, Pian, col. 7, lines 51-68.

Thus, the supervisory control processor 122 coordinates dispatching of a task to a specific distributed arithmetic processor 114 other than the one associated with the owner of the task. The Office Action states "… Pian et al. disclose a centralized accounting manager 122 which discloses determining an upper threshold for the local resource 146, e.g., an "upper limit is placed on the local ready task entry queue 146" and has a determined upper limit of resource consumption for the remote processor." (Emphasis added). *See*, Office Action, page 4, last paragraph. As described in Pian and as noted in the Office

Action, an upper limit is placed on the local ready task entry queue 146. In contrast, claim 1 describes resources that may be consumed by the remote processor. Because Pian describes an upper limit on a local ready task entry queue and does not describe the claimed resources that may be consumed by the remote processor, Pian does not describe the claimed subject matter.

Also, the Office Action states "… Pian et al. disclose releasing ready task entries to remote processors 112 when the processors 112 are not in a more than they can hold mode." *See*, Office Action, page 4, last paragraph. The Office appears to take the position that Pian describes "releasing the local resource to the remote processor based on the collected accounting information and if an amount of resources consumed by the remote processor is below the upper limit, the utilization of the local resource maintained within a pre-determined upper threshold," as claimed. If true, this contention should be reconsidered.

Ready task entries, as described in Pian, are not "local resource" as claimed. Pian states "A ready task entry contains information relating to the identification of the signal processing primitive function and the input data blocks associated therewith. The input data blocks of a ready task entry may be scattered among the data memories 132, 144 of multiple processor nodes 124." *See*, Pian, col. 8, lines 46 - 52. Thus, Pian's ready task entry contains information relating to the identification of the signal processing function and associated input data blocks. Pian's ready task entry is not a local resource controlled by the host processor, where the local resource is included in the resources of a corresponding networked processor, as claimed. Because Pian does not describe

or suggest "a local resource," as claimed, Pian does not teach "releasing the local resource to the remote processor," as claimed.

In addition, neither Blumenau nor Bonnell nor Pian, taken alone or in any combination, describe or suggest "an upper threshold" and "an upper limit" as claimed. Blumenau teaches dynamic load balancing based on a frequency of transmission of data packets. Pian describes transmitting ready task entries between processors based on a size of a ready task entry queue. The cited portion of Bonnell teaches monitoring resources and does not teach a threshold. Thus, the cited references describe either one or no threshold or limit. The cited references do not teach "an upper threshold" and "an upper limit," as claimed.

Blumenau, Bonnell, and Pian, taken alone or in any combination do not teach all the features of the claimed subject matter. Further, the Office has not offered articulated reasoning with a rational underpinning to conclude that the suggested combination of Blumenau and Bonnell would have been obvious. Furthermore, the Office has relied on inappropriate hindsight reconstruction to arrive at the conclusion of obviousness. Therefore, a *prima facie* case of obviousness has not been established.

Accordingly, claim 1 and all claims dependent therefrom are allowable over the suggested combination of Blumenau, Pian, and Bonnell. Applicant respectfully requests that the rejections of claims 1-9 over the suggested combination of the cited references be withdrawn.

CONCLUSION

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific

rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

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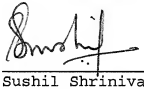
Respectfully submitted,



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